Research Paper

Investigating ESP Needs Analysis in Iranian Universities: The Case of Social Sciences Students

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Abstract
This study aimed to discover and compare students' and instructors' present needs in ESP Social Sciences courses in Iranian universities using the applied descriptive survey method. The population of this study consisted of 98 Social Sciences students at B.A level and 30 ESP instructors. Both students and instructors were selected purposefully from some universities of Markazi province, including Islamic Azad University of Ashtiyan Branch, Arak State University, Islamic Azad University of Arak Branch as well as Arak Farhangian University. To collect the data, two questionnaires, which were adapted from Mazdayasna and Tahririan (2008), were employed that included four English language skills. The results indicated a significant difference between the perceptions of the students and their instructors about their preferred skills. For the students, reading (Mean Rank (MR)= 3.77) was

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the most preferred skill as the present need, and it was followed by writing (MR = 3.07), listening (MR= 1.76), and speaking (MR = 1.41). However, for instructors, reading (MR = 3.63) was the most preferred skill as present need, followed by writing (MR= 3.12), speaking (MR= 2), and listening (MR= 1.25). Based on the results, revision of the current program seems to be necessary to provide the Iranian Social Sciences students with more effective ESP courses. This study may have some implications for ESP instructors, students, ESP curriculum developers, and syllabus designers.

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Dudley-Evans and St. John (1998) defined English for Specific Purposes (ESP) as a course designed for intermediate and upper-level learners, and it can also be proper for adult students in either an academic or professional context. Based on Hutchinson and Waters (1987), teaching ESP must be addressed as an approach than a product, and it is not related to any specific method or language.

Regarding the differences between ESP and English for General Purposes (EGP) approach, Hutchinson and Waters (1987, p. 53) noted that "in theory nothing, in practice a great lot". Indeed, the recent developments lead to these novel challenges, and some of them could be because of the discord between the workplace and the academic contexts requirements. Due to the increasing development of interdisciplinary subjects within and across the disciplines and fields, significant issues in language teaching and learning methods and practices, including ESP, have risen (Mohseni, 2021).

Many researchers (e.g., Brown, 2009; Dudley-Evans & St. John, 1998; Flowerdew, 2013; Hyland, 2014; Johns & Makalela, 2011; Kaivanpanah et al., 2021; Long, 2005; West, 1994) studied the importance of applying needs analysis (NA) in education in general and in language education in particular. According to Richards (2001), NA is significant in setting goals and

objectives, designing materials and curriculum as well as evaluating teaching programs. Whether the needs are divided into learning needs and target needs (Hutchinson & Waters, 1987), or they are classified as present situation needs (Hyland, 2006) and target situation needs (Richterich & Chancerel, 1980), it is necessary to recognize the learners' needs before designing a language course (Long, 2005). The scholars, who are in favor of a comprehensive NA of all English as a foreign language (EFL) or English as a second language (ESL) students, maintain that language education needs to be focused on the learners' needs and aims (Mohseni, 2021). Basturkmen (2006) pointed out a learners-needs-based syllabus could be encouraging for the learners as they may observe the relevance of their English language education to their specific needs. Needs could be thought of as what society, an organization, and language teaching and programs believe necessary (Mountford, 1981 as cited in Park, 2021). Furthermore, needs may include the students' goals for enrolling in the course and their awareness of their language proficiency (Hyland, 2014). In this regard, Brown (2016) described language needs as "sets of judgments and compromises justified by observation, surveys, test scores, language learning theory, linguistics" (p. 16). NA is considered as the process in which data from various sources is collected, analyzed, and assessed to meet the ESP learners' particular needs (Gea-Valor, Rey-Rocha, & Moreno, 2014; Huhta et al., 2013). Additionally, Long (2005) argues it is impossible to design a language teaching program unless the learners' needs are thoroughly analyzed. NA is "the process of determining the needs for which a learner or group of learners require a language and arranging the needs according to priorities" (Richards et al., 1985, p.189). According to Long (2005), investigation of students' needs is required for efficient course designing.

Moreover, according to Hyland (2006), NA is a constant process as the teaching procedure should be modified since the teachers come to learn more about their learners. As a consequence, it indeed turns into the evaluation as the means of developing the course efficiency. The primary purpose of performing NA was to develop appropriate ESP materials for learners (Flowerdew, 2013). Many investigators throughout the world have focused their empirical research studies on NA of ESP learners (e.g., Long, 2005; Jasso-Aguilar, 2005; Mazdayasna & Tahririan, 2008; Rostami & Mahdavi, 2014; Aliakbari & Boghayeri, 2014; Nemat & Mojoudi, 2016; Mohseni, 2021).

Upon passing ESP courses, students are expected to achieve an acceptable level of proficiency in ESP. Despite passing the ESP courses at the university, students appear not to possess enough knowledge and skills to deal with their target language needs. Accordingly, in recent years, many university graduates in different fields of study enrolled in different private ESP courses due to their desire to enhance their ESP knowledge to be accepted in higher education or continue their studies abroad in international universities (Aliakbari & Boghayeri, 2014). While the need for ESP courses is expanding more and more in Iran, governmental organizations, like the Ministry of Science, Research, and Technology, which are responsible for monitoring and designing ESP materials, are not seriously systematically examining the effectiveness of materials based on NA approach for gathering information on students' current and target needs (Atai & Tahririan, 2003). In addition, Fard-Kashani et al. (2015) believe that "no serious needs analysis study has guided ESAP/EAP curriculum planning, course design, and textbook development in Iran." Likewise, in Social Sciences in the Iranian ESP context, though there are some ESP materials, they are neither updated nor based on NA. The problem is that Social Sciences as an umbrella term

equals Humanities, which covers several fields (Bharti, 2020). At the same time, there are only a few ESP materials for some specific fields in Humanities. Therefore, ESP instructors should provide students with the available ESP materials with no serious consistency between the materials and learners' needs. As a result, the present study aims to explore the needs of Iranian Social Sciences ESP students from the Social Sciences students' and ESP instructors' points of view in the Iranian ESP context. By investigating the students' and instructors' views regarding the Social Sciences ESP courses, it is possible to find the differences and inconsistencies between their views and revise the ESP courses at the BA level based on these findings to improve the efficiency of the Social Sciences ESP courses in the Iranian ESP context.

Ozyel et al. (2015, p.265) believe that "needs analysis can be conducted before the course, after the course or with a combination of both." If NA is administered before a course, it increases the students' insights on resources, objectives, and even their suitable curricula. If it is carried out during the course, it indicates whether there is compatibility between resources and the course students follow as well as objective, methodology, and assessment. And finally, if NA is undertaken after the course, it provides the stakeholders with deficiencies in the educational program and incompatibilities between the course and its claimed objectives (Ozyel et al., 2015). Thus, the significance of this research study is that the findings obtained from this research could have valuable contributions for ESP instructors, syllabus designers, and curriculum and materials developers. In addition, the present study could pave the way for further NA research in other disciplines and fields of study. Moreover, the results of this study could provide needs analysis of Social Sciences ESP courses to develop the Social Sciences ESP curriculum and syllabus in the universities under investigation.

2. Literature Review
2.1 Needs Analysis in ESP

Several attempts with different orientations have been made for NA in ESP in the last decades (Long, 2005). It is believed that NA is especially important during the research for course design, textbook preparation as well as deciding on teaching/learning methodologies in ESP settings (Dudley-Evans & St. John, 1998; Long, 2005). Moreover, Basturkmen (2006) considers NA as a cornerstone in any ESP course planning and implementation and adds that NA influences students' motivation as they will surely understand the results of their ESP course. For Brown (2009), NA is the process of getting information about the needs of a group of clients in education or industry. In addition, Brunton (2009) introduces two narrow and broad approaches to the needs setting. While the narrow approach considers the immediate needs of the learners for a limited syllabus, the general approach concentrates on needs, skills, and situations that cannot be found in the NA process. While the primary works on NA tried to find out what the purposes of EFL/ESL learners were, the modern and more complex approach to ESP NA looks for why they need to study a course in English alongside situations and skills (Flowerdew & Peacock, 2001). ESP courses mainly focus on the actual implementation of the English language in a working context than acquiring language structures and language items. One of the main differences between ESP and GE is that ESP cannot be instructed merely by disregarding the language use context (Li & Fu, 2021). Therefore, NA plays a significant role in designing and developing ESP courses. Although the intricacy of applying a needs-oriented ESP approach cannot be disregarded, NA as a decision-making procedure, which extends course design provisions (Bosher & Smalkoski, 2002) is considered a necessary element of every ESP course (Long, 2005).

2.2 Empirical Studies

Petraki and Khat (2020) investigated the possible challenges and limitations of both industry and academic curriculum development and syllabus designers who developed an ESP course in Science, Technology, Engineering, and Mathematics (STEM). The interviews and document analysis were applied for data collection. The findings indicated that the challenges consisted of the lack of ESP training chances, a lack of instructor incentives, material design difficulties, and the English language proficiency of the learners. The results implied the significance of cooperation and joint decision-making as the fundamental aspects of designing and developing ESP courses. Many NA studies heavily focus on learners' views on developing and designing ESP courses. Notwithstanding, Petraki and Khat (2020) explored the stakeholders' perspectives in an attempt to fill the gap in the NA in ESP-related literature. In the same vein, Ahmmed et al. (2020) investigated the language needs of Bangladeshi sailors who work on ships and look for maritime job opportunities through a mixed-methods design. The participants included senior cadets and employing agencies. The findings showed that communication effectiveness was an essential ability for the sailors, and the agencies preferred to hire the cadets who had better oral proficiency. The significance of their study lies in the fact that no study was undertaken on the NA of maritime abilities.

In the Iranian context, Vahdat et al. (2022) investigated the different aspects of the ESP Needs of MA students of Ancient Iran History studying at the Department of History in Iranian universities. Forty-five MA students and 5 ESP instructors expressed their views through questionnaires and interviews. The results revealed that the students asked for the inclusion of the four language skills in their ESP courses. That is, a new ESP course focusing on the integration of all four skills should be developed. The

instructors, however, echoed the reading skill as the predominant need for students to achieve a higher standard in academic and future careers. However, in other disciples, like aviation, the oral and aural skills could be presented before other skills based on the students' needs (Ahmmed et al., 2020; Taghipour et al., 2020). The interviews showed that the ESP courses were not sufficient to account for the specific needs of the students since these courses were not prepared according to the learners' needs. The students expressed that they needed to master English because they had to use English sources during their academic studies. However, the ESP courses did not fully prepare the students to embark on their studies because they did not sufficiently take into account the learners' needs. They delimited their study to explore the instructors' and students' views at the MA level. In addition, they also investigated the needs of one academic major at MA level, Ancient Iran History, and the needs of other academic majors were not addressed.

Similarly, Mohseni (2021) studied the Iranian university law students' ESP needs. The participants were three groups of law students: 10 BA, 10 MA, and 10 PhD students. Data were collected using a questionnaire which was supplied to decide if these participants were really willing to have ESP programs and to be taught in English or Persian language. The findings revealed that the students believe the English language is not important since some of the teachers teach the materials in Persian language, and they also do not mind if their students use the Persian language in their answers to the exam questions even if the exam is in English. In addition, the participants in all three groups are happier with the ESP practitioners' use of English in class and their provision of relevant information and procedures for teaching all four language skills equally. One of the main shortcomings of his study is that he did not explore the ESP instructors' view. In addition, the number of

the participants was limited to 30 students, and the study should be replicated with more participants. Likewise, Javid and Mohseni (2020) identified the needs of the ESP course for guarding police cadets. Through NA, students' factors, target and present situations, and the participants' specialist discourse were examined. The results revealed the stakeholders' various needs and the inconsistency between the main aim of the syllabus and the ESL course. The findings of their study could be implemented in Police universities, and they could not be considered in other universities. Moreover, Yatroon (2020) studied international law learners' English language needs with the implementation of the mixed-methods design at Iranian universities. The findings indicated a mismatch between the students' needs and the anticipated needs from the related activities in the coursebooks; the results could be applicable to material designers and curriculum developers in the law ESP field. Similarly, Taghipour et al. (2020) have recently conducted an NA for ESP practitioners. Their findings showed that both learners and teachers indicated speaking and listening skills among the first most significant abilities in acquiring English; furthermore, poor speaking and listening skills were reported as the students' weaknesses by the participants. Moreover, the number of the participants in their study was too small to be able to generalize the findings to other contexts. Along similar lines, the effectiveness of their ESP courses, and the needs and views of architecture students and graduates, were examined by Aliakbari and Boghayeri (2014). Their results indicated that the participants' primary skills were, respectively, reading, writing, speaking, and listening. Additionally, the participants believed that the length of the texts was inappropriate for the ESP classes and were not satisfied with the textbooks' content. They held that the courses did not completely meet their needs. Furthermore, the number of the participants

of their study was too small to be able to generalize the findings to other contexts.

As far as the researchers of the present study reviewed the related literature, there was no study to explore the needs of Iranian Social Sciences ESP students of different majors at the BA level from Social Sciences students' and ESP instructors' points of view in the Iranian ESP context. As a result, to fill this gap in the literature, the researchers decided to conduct a needs analysis study among two groups of the Social Sciences students and ESP instructors in four universities in Markazi province in Iran. As a result, this study aimed to answer the following research questions,

1. What are the specific English language present needs of the Iranian Social Sciences students from the students' point of view?
2. What are the specific English language present needs of the Iranian Social Sciences students from the instructors' point of view?
3. Is there any statistically significant difference between the present needs in the ESP Social Sciences course from the students' and the instructors' points of view?

Since the instructors' and students' data on preferred present needs of speaking did not meet the normality assumption, the third research question was restated as two minor ones as follows,

1. Are there any significant differences between the preferred present needs of reading, writing, and listening of the students and the instructors?
2. Is there any significant difference between the preferred present needs of speaking of the students and the instructors?

3. Method
3 .1 Participants

Based on Brindley's view (1989), Kaewpet (2009) suggested three factors in choosing appropriate subjects for NA, namely, "purposeful sampling; multiple perspectives; and having suitable 'insiders' and 'outsiders'" (p.

269). Purposeful sampling must be representative and informative in the real context. In the present study, the participants should consist of the teachers who taught the Social Sciences ESP course since their perception about the course could strongly impact learners' performance and learning in the ESP course, and also the sample should include the Social Sciences students to find their perspectives regarding their needs of English language in their fields of study. As a result, two groups of students and instructors of Social Sciences fields participated in this study. The first group included 98 undergraduate students majoring in different fields of Social Sciences, including sociology, psychology, educational technology, educational sciences, political sciences, and management. They were selected from sophomore Social Sciences students who had already passed the general English courses and taken their ESP course while conducting the present research. Their age was 20-29, and they were both male and female students. The second group of participants included 30 faculty members who were PhD students or PhD holders in different Social Sciences disciplines and Teaching English as a Foreign Language (TEFL) majors. They have had 3 to 30 years of ESP teaching experience in the Social Sciences disciplines. Both students and instructors were selected purposefully from some universities of Markazi, including *Islamic Azad University of Ashtiyan Branch*, *Arak State University*, *Islamic Azad University Arak Branch* as well as *Arak Farhangian* University.

3.2 Instruments
3.2.1 Student NA questionnaire

The student NA questionnaire was adapted from Mazdayasna and Tahririan's study (2008). They developed this questionnaire for instructors and students of midwifery and nursing in medical faculties of some of the Iranian universities. The required information for the preliminary version of

the NA questionnaire was obtained through interviews. And through a piloting process along with validity and reliability conformation, the final questionnaire was developed. The questionnaire comprises two sections after six questions that deal with personal information, such as name, gender, and the department in which the students were enrolled. The first, which has 21 items (items 1–21), was created to determine the students' perceptions about their stated needs for English language proficiency in their field of study. The second section, which includes fourteen items (items 22–35), asks students for their opinions on a variety of topics, including the course length, the content, syllabus, and methodology of the ESP course, as well as the demands and needs they have in terms of language. Additionally, each item was scored on a six-point Likert scale that ranged from 6 (to a very great extent) to 1 (not at all). The questionnaire's reliability was examined using Cronbach's alpha, and the result (r=.81) fell within an acceptable range, confirming the usefulness of this instrument in the novel context. Exploratory factor analysis was used to identify the questionnaire's underlying constructs and assess the its validity. The results showed three factor solutions with 42 % accuracy. The content validity of the questionnaire was evaluated by three TEFL PhD holders, who confirmed its content validity.

3.2.2 Instructor NA questionnaire

The instructor NA questionnaire was adapted from Mazdayasna and Tahririan (2008). It included two parts. Items 1–37 in the first section investigate the teachers' viewpoints on the students' demands for learning a foreign language related to their academic pursuits when applying the four skills. Instructors assess the student's English language ability in the second part, items 38–42, by stating the degree to which they achieved the requisite competence and performance after passing the ESP course. Additionally, each item was scored on a six-point Likert scale that ranged from 6 (to a very

great extent) to 1 (not at all). The reliability of the questionnaire was checked using Cronbach's Alpha, and the result (r=.84) was in an acceptable range. Exploratory factor analysis was used to identify the questionnaire's underlying constructs and assess the questionnaire's validity. The results revealed three factor solutions with an accuracy of 45%.

3.3 Procedure

As an applied descriptive survey method, only a quantitative approach was used in this research in which two NA questionnaires were employed to collect the data. Since this study aimed to investigate the present needs of Social Science students in their ESP course, the following steps were taken to achieve the purpose of the study. First, 98 Social Sciences students and 30 ESP instructors were purposefully selected from four different Iranian universities in Markazi Province to perform the NA through two NA questionnaires. Then, the researchers explained the purpose of the study to the participants and obtained their consent to participate in the study through a consent form. Then, the questionnaires were administered to the two groups of participants through *Google Forms*. The data collection process took two months and the first researcher collected all data. In addition, the participants have assured about the confidentiality of their answers, and also, they were told that the responses would not have any effect on their academic careers.

Statistical Package for Social Sciences (SPSS) version 24 was used to analyze the quantitative data. At first, the assumptions of lack of univariate and multivariate outliers and normality were checked. The assumption of lack of multivariate normality was explored through Mahalanobis Distances (MD), and the assumption of normality of the data was probed by comparing the skewness and kurtosis indices. For the first two research questions, a non-parametric Friedman's test was run to compare the order of preferred skills as the present needs in the Social Sciences ESP course for the students and the

instructors. Additionally, post-hoc comparison tests and pairwise comparisons tests were used to compare the preference of every paired skill as present needs both for students and instructor groups. To test the null hypothesis for the final research question and its associated hypothesis, a multivariate ANOVA (MANOVA) was conducted to compare the means of the instructors and students in terms of their current needs for reading, listening, and writing.

4. Results

4.1 Addressing the first research question

What are the specific English language present needs of the Iranian Social Sciences students from the students' point of view?

The assumption of normality of the data was probed by comparing the skewness and kurtosis indices against the criteria of +/- 2. The results showed that three variables did not meet the normality assumption. Consequently, to probe the first research question, the order of preferred skills as the present needs in the Social Sciences ESP course for the students, a non-parametric Friedman's test was run. Table 1 displays the mean ranks for the students to explore the preferred skills of the students. The results showed that reading (MR= 3.77) was the most preferred skill as present need. This was followed by writing (MR = 3.07), listening (MR = 1.76) and speaking (MR = 1.41).

Table 1
Mean Rank: Preferred Present Needs (Students)

	Mean Rank
Present Need LC	1.76
Present Need SP	1.41
Present Need RC	3.77
Present Need WR	3.07

Table 2 displays the results of the Friedman test. The Friedman test is used for one-way repeated measures analysis of variance by ranks to explore differences between the order of preferred skills as the present needs in the Social Sciences ESP course for the students. The results (χ^2 (3) = 218.74, p < .05, W = .744 representing a large effect size) indicated that there were

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significant differences between the order of preferred skills as the present needs in the Social Sciences ESP course for the students.

Table 2
Friedman Test; Preferred Present Needs (Students)

N	98
Chi-Square	218.74
Df	3
Asymp. Sig.	.000

Table 3 displays the results of the post-hoc comparison tests. These tests are used for fixed between-subjects factors. The results indicated that there was not any significant difference between students' present preferred needs of speaking MR = 1.41) and listening (MR = 1.76) (MRD = .347, $p > .05$). In addition, the students significantly preferred writing (MR = 3.07) over speaking (MR = 1.41) as their present need (MRD = 1.66, $p < .05$). Furthermore, the students significantly preferred reading (MR = 3.77) over speaking (MR = 1.41) as their present need (MRD = 2.35, $p < .05$). Additionally, the students significantly preferred writing (MR = 3.07) over listening (MR = 1.76) as their present need (MRD = 1.31, $p < .05$). Moreover, the students significantly preferred reading (MR = 3.77) over listening (MR = 1.76) as their present need (MRD = 2.01, $p < .05$). Finally, the students significantly preferred reading (MR = 3.77 over writing (MR = 3.07) as their present need (MRD = .697, $p < .05$).

Table 3
Pairwise Comparisons Tests; Preferred Present Needs (Students

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. [a]
Present Need SP-Present Need LC	.347	.184	1.88	.060	.360
Present Need SP-Present Need WR	-1.66	.184	-9.01	.000	.000
Present Need SP-Present Need RC	-2.35	.184	-12.78	.000	.000
Present Need LC-Present Need WR	-1.31	.184	-7.13	.000	.000
Present Need LC-Present Need RC	-2.01	.184	-10.90	.000	.000
Present Need WR-Present Need RC	.694	.184	3.76	.000	.001

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

4.1.2 The second research question

What are the specific English language present needs of the Iranian Social Sciences students from the instructors' point of view?

To answer the second research question, the order of preferred skills as the present needs in the Social Sciences ESP course for the instructors, a non-parametric Friedman's test was run. Table 4 displays the mean ranks for the instructors. The results showed that reading (MR = 3.63) was the most preferred skill as a present need of instructors. This was followed by writing (MR = 3.12), speaking (MR = 2) and listening (MR = 1.25).

Table 4
Mean Rank: Preferred Present Needs (Instructors)

	Mean Rank
Present Need LC	1.25
Present Need SP	2.00
Present Need RC	3.63
Present Need WR	3.12

Table 5 displays the results of the Friedman test. The results (χ^2 (3) = 63.43, p < .05, W = .704 representing a large effect size) indicated that there were significant differences between the order of preferred skills as the present needs in the Social Sciences ESP course for the instructors.

Table 6 displays the results of the post-hoc comparison tests. The results indicated that

A: The instructors significantly preferred speaking (MR = 2) over listening (MR = 1.25) as their present need (MRD = .750, p > .05).

B: The instructors significantly preferred writing (MR = 3.12) over listening (MR = 1.25) as their present need (MRD = 1.86, p < .05).

C: The instructors significantly preferred reading (MR = 3.63) over listening (MR = 1.25) as their present need (MRD = 2.38, p < .05).

Table 6
Pairwise Comparisons Tests; Preferred Present Needs (Instructors)

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. [a]
Present Need LC-Present Need SP	-.750	.333	-2.25	.024	.147
Present Need LC-Present Need WR	-1.86	.333	-5.60	.000	.000
Present Need LC-Present Need RC	-2.38	.333	-7.15	.000	.000
Present Need SP-Present Need WR	-1.11	.333	-3.35	.001	.005
Present Need SP-Present Need RC	-1.63	.333	-4.90	.000	.000
Present Need WR-Present Need RC	.517	.333	1.55	.121	.727

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

D: The instructors significantly preferred writing (MR = 3.12) over speaking (MR = 2) as their present need (MRD = 1.11, p < .05).

E: The instructors significantly preferred reading (MR = 3.63) over speaking (MR = 2) as their present need (MRD = 1.63, p < .05).

F: There was not any significantly difference between instructors' present preferred needs of reading MR = 3.63) and writing (MR = 3.12) (MRD = .517, p > .05).

4.1.3 Addressing the third research question

Is there any statistically significant difference between the present needs in the ESP Social Sciences course from the students' and the instructors' points of view?

4.1.3.1 Exploring the first Null-Hypothesis

The first null hypothesis assumes that "there are not any significant differences between the preferred present needs of reading, writing, and listening of the students and the instructors." A multivariate ANOVA (MANOVA) was run to compare the instructors' and students' means of present needs of reading, listening, and writing to explore the null hypothesis. In addition to the earlier described assumptions, MANOVA contains two additional assumptions: homogeneity of covariance matrices and homogeneity of group variances. The correlations between any two present needs must be substantially comparable across the two groups to meet the

condition of homogeneity of the covariance matrices. The assumption of homogeneity of covariance matrices was not met, according to the significant findings of Box's test (Box's M = 50.41, p < .05). Li and Chen (2019, cited in Aryadoust & Raquel 2019, p. 202) noted that the results of the Box's test are significant. The groups do not have equal sample sizes, "*Pillai–Bartlett Trace (Pillai's Trace)* statistics in MANOVA are recommended for their robustness." The first null hypothesis is explored based on Pillai's Trace F-value in Table 7.

Table 7
Box's Test of Equality of Covariance Matrices; Present Preferred Needs by Groups

Box's M	50.41
F	8.06
df1	6
df2	17399.94
Sig.	.000

MANOVA also assumes that the groups enjoy homogenous variances in the preferred present needs of reading, listening, and writing. As displayed in Table 8, the instructors and students enjoyed homogenous variances on present need writing (F (1, 126) = 1.15, p > .05); however, the assumption of homogeneity of variances was violated on preferred present needs of listening (F $_{(1, 126)}$ = 10.07, p < .05), and reading (F (1, 126) = 10.28, p < .05). To tackle the violation of this assumption, one solution is to reduce the alpha level from .05 to .01; based on Tabachnick and Fidell (2014, p. 120), "Violations of homogeneity usually can be corrected by the transformation of the DV scores". Interpretation, however, is then limited to the transformed scores. Another option is to use untransformed variables with a more stringent a level (for nominal a, use .025 with moderate violation and .01 with severe violation)". The MANOVA results displayed in tables 7 and 8, to be on the safe side, were reported at .01 level of significance.

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Table 8
Levene's Test of Equality of Error Variances; Preferred Present Needs by Groups

		Levene Statistic	df1	df2	Sig.
Present Need LC	Based on Mean	9.06	1	126	.003
	Based on Median	10.07	1	126	.002
	Based on Median and with adjusted df	10.07	1	117.97	.002
	Based on trimmed mean	9.67	1	126	.002
Present Need RC	Based on Mean	21.46	1	126	.000
	Based on Median	10.08	1	126	.002
	Based on Median and with adjusted df	10.08	1	105.70	.002
	Based on trimmed mean	16.04	1	126	.000
Present Need WR	Based on Mean	.932	1	126	.336
	Based on Median	1.15	1	126	.284
	Based on Median and with adjusted df	1.15	1	125.39	.284
	Based on trimmed mean	1.27	1	126	.260

Table 9 displays the descriptive statistics for the instructors and students on present needs of listening, reading, and writing. The results showed that instructors had higher means than students on present needs of listening (M = 3.79 vs. 2.82), reading (M = 4.72 vs. 4.55), and writing (M = 4.74 vs. 3.81).

Table 9
Descriptive Statistics; Present Preferred Needs by Groups

Dependent Variable	Group	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Present Need LC	Students	2.82	.049	2.72	2.92
	Instructors	3.79	.088	3.62	3.96
Present Need RC	Students	4.55	.053	4.44	4.65
	Instructors	4.72	.095	4.53	4.90
Present Need WR	Students	3.81	.045	3.72	3.90
	Instructors	4.47	.082	4.31	4.63

Table 10 displays the results of MANOVA. The results (F (3, 124) = 44.40, p < .01, partial η^2 = .518 representing a large effect size) indicated that there were significant differences between the instructors' and students' present needs of reading, listening, and writing. Thus, the first null hypothesis was rejected.

Table 10
Multivariate Tests; Present Preferred Needs by Groups

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.994	6698.45	3	124	.000	.994
	Wilks' Lambda	.006	6698.45	3	124	.000	.994
	Hotelling's Trace	162.05	6698.45	3	124	.000	.994
	Roy's Largest Root	162.05	6698.45	3	124	.000	.994
Group	Pillai's Trace	.518	44.40	3	124	.000	.518
	Wilks' Lambda	.482	44.40	3	124	.000	.518
	Hotelling's Trace	1.07	44.40	3	124	.000	.518
	Roy's Largest Root	1.07	44.40	3	124	.000	.518

Table 11 displays the results of the between-subjects effects. Based on these results and the descriptive statistics displayed in Table 9, it can be concluded that

A: The instructors (M = 3.79) showed a significantly higher preference towards listening as their present need than students (M = 2.82) (F (1, 126) = 92.22, p < .01, Partial η^2 = .423 representing a large effect size).

B: There was not any significant difference between instructors' (M = 4.72) and students' (M = 4.55) preference toward reading as their present need (F (1, 126) = 2.41, p > .01, Partial η^2 = .019 representing a weak effect size).

Table 11
Tests of Between-Subjects Effects; Present Preferred Needs by Groups

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Group	Present Need LC	21.59	1	21.59	92.22	.000	.423
	Present Need RC	.656	1	.656	2.41	.123	.019
	Present Need WR	9.88	1	9.88	49.31	.000	.281
Error	Present Need LC	29.50	126	.234			
	Present Need RC	34.21	126	.272			
	Present Need WR	25.26	126	.201			
Total	Present Need LC	1243.44	128				
	Present Need RC	2732.32	128				
	Present Need WR	2055.25	128				

C: The instructors (M = 4.47) showed a significantly higher preference towards writing as their present need than students (M = 3.81) (F (1, 126) = 49.31, p < .01, Partial η^2 = .381 representing a large effect size).

4.1.3.2 Exploring the second Null -Hypothesis

The second null hypothesis assumes that "there is no significant difference between the preferred present needs of speaking of the students and the instructors." Since instructors' and students' data on the present need of speaking did not meet the normality assumption, a non-parametric Mann-Whitney U test was run to compare the two groups' means ranks on the present need of speaking. As displayed in Table 12, the instructors (MR = 107.48) had a higher mean on the present need of speaking compared to the students (MR = 51.34).

Table 12
Mean Ranks on Preferred Present Need of Speaking by Groups

	Group	N	Mean Rank	Sum of Ranks
	Students	98	51.34	5031.50
Present Need SP	Instructors	30	107.48	3224.50
	Total	128		

Table 13 displays the results of the Mann-Whitney U test. The results (Z = -7.28, p < .05, r_g = .877 representing a large effect size) indicated that the instructors had a significantly higher mean rank on the present need of speaking than that of students. Thus, the second null hypothesis was rejected.

Table 13
Mann-Whitney U Test; Preferred Present Need of Speaking by Groups

	Present Need SP
Mann-Whitney U	180.500
Wilcoxon W	5031.500
Z	-7.285
Asymp. Sig. (2-tailed)	.000

5. Discussion

The first and second research questions dealt with the NA in the Social Sciences ESP course, which investigated the preferred skills that the Iranian Social Sciences students needed from both the students' and the instructors' points of view. The findings showed that considering the present needs of students, both groups of participants, namely the students and the instructors,

indicated agreement on the importance of English skills as present needs; however, their priorities were different to some extent as the order of perceived skills showed. The findings concerning the first and second research questions revealed that students perceived reading (MR = 3.77), writing (MR = 3.07), listening (MR = 1.76), and speaking (MR = 1.41) as the present needs, respectively, whereas instructors perceived reading (MR = 3.63), writing (MR = 3.12), speaking (MR = 2), and listening (MR = 1.25) as the present needs, respectively. Therefore, reading skill was the most preferred skill as a present need both for students and instructors. The next preferred skill was writing again for both groups, though there was a difference in their preference for other skills, namely listening and speaking. That is, speaking was the least preferred skill for the student group, while the instructors preferred listening as the least preferred skill. The findings are in harmony with the results of several studies conducted for different ESP courses. All the studies confirmed the inclusion of primary skills in ESP courses with a slight difference in their order and preference based on fields of studies (e.g., Akbari, 2016; Aliakbari & Boghayeri, 2014; Mazdayasna & Tahririan, 2008; Taghipour et al., 2020; Zohorian, 2015). The findings were consistent with the results of Aliakbari and Boghayeri (2014), Mal Amiri (2008), Soodmand Afshar and Movassagh (2016), and Vahdat et al. (2022) studies in which the stakeholders perceived reading comprehension as the paramount need for EAP students. The findings of the present study concerning the learners' preference toward reading and writing skills over speaking and listening skills can be attributed to the demanding nature of oral and aural skills in the ESP context (Khamkhien, 2010; Srabua, 2007) in which these skills were assessed as the most challenging skills for ESP students. This is attributable to the fact that in Iran and other Asian EFL contexts, students have restricted interaction and contact with native English

speakers (Taghipour et al., 2020). However, in the Iranian ESP context, most of the ESP instructors prefer to teach in the Persian language as the student's native tongue and resort to translation of English texts (Meihami & Werbińska, 2022); therefore, ESP students could not develop their oral and aural proficiency in the ESP classes. As a consequence, they perceive these skills as the most demanding English language skills, and this could lead to a lack of confidence in using English in classrooms and workplace contexts. In addition, Vahdat et al. (2022) found that the students believed teaching listening, speaking, and writing skills has been neglected in the ESP courses emphasizing that it was limited to only teaching reading and translating passages. However, while reading comprehension was the focus of the ESP course, the perceived reading ability was insufficient to meet the challenge of the large number of reading materials that were expected to handle. For future jobs, they need to read professional articles and be able to interpret, summarize, and in some cases, report. It was demanding for them to translate texts abounded with specialized vocabulary (Vahdat et al., 2022).

The results of this study are consistent with those of Mazdayasna and Tahririan's (2008) study on the ESP needs of undergraduate medical science students in which the students confirmed that reading proficiency was preferred over listening, speaking, and writing as the most crucial skills for their studies. Students' language abilities left almost all subject-specific instructors unsatisfied since they lacked sufficient competency in the four skills and would struggle to complete the current ESP course and upcoming jobs. Likewise, they maintained that students needed to work on their reading at first and then on listening, speaking, and writing skills, even if the teachers placed more value on these skills than did the students. Furthermore, the results correspond to the results of Akbari (2016), who found that students' English educational needs in the related medical sciences fields were not

limited only to reading comprehension, and the students also preferred listening, speaking, and writing skills as well as frequent needs to translation and medical terminology. Different results in order of skills and priorities can be contributed to the content of the courses and fields of studies as well as teaching methodology and importance of English in each study. While students in Social Sciences pass only seven credits in English (prerequisite English, GE, and ESP), the students in some medical sciences fields, such as medical librarianship and health information technology, pass 24 credits in English. Therefore, it is evident that the importance and the role English played in these fields influenced students' attitudes and priorities. Additionally, the findings are in line with the findings of NA research conducted by Adzmi et al. (2009) for industrial design students, in which ESP instructors recognized reading as the most important skill for students and considered ESP a reading-based course. Moreover, the findings also lend credence to the results of Aliakbari and Boghayeri (2014), who discovered that reading, writing, speaking, and listening skills were respectively the significant skills recognized by the architecture students and graduates. The participants held that the courses did not completely meet their needs. However, the findings of the present study are not in agreement with those of Eslami (2010), who pointed the need to increase students' speaking and listening comprehension skills. However, the significance of the skills is related to the nature of the disciplines (Ahmmed et al., 2020; Taghipour et al., 2020).

Moreover, the findings are not in line with the results of Taghipour et al. (2020) since the participants, who were cabin crew students and instructors, chose reading skill as their seventh priority out of nine. They selected communicative, oral, and aural skills as the first three essential skills in this field. The difference in the findings can be attributed to the nature of this job.

Both groups of participants knew the vital importance of communicative, listening, and speaking skills as they passed operational-specific courses in this job and had experienced flying. In addition, the results of this study do not support the findings of Zohoorian (2015), who found that speaking was the most important skill, followed by writing, reading, and listening in his NA research on the students majoring in Computer Engineering and information technology. Furthermore, the findings are not in harmony with the results of Ahmmed et al. (2020), who investigated the language needs of Bangladeshi sailors, and their results showed that communication effectiveness was an essential ability for the sailors. The agencies preferred to hire the cadets who have better oral proficiency.

The results of the third research question, which aimed at investigating any possible differences between students' and instructors' perception of ESP needs in Social Sciences, indicated that there were significant differences between the instructors' and students' present preferred needs of listening, writing, and speaking but not for reading. Although for both groups reading, followed by writing was preferred as the most critical skill, the order and mean scores of other skills were different. The findings are in line with several other studies (e.g., Akbari, 2016; Ferris, 1998; Robinson, 1991), but they are not in agreement with the findings of Taghipour et al. (2020), whose study showed that teachers' perceptions of the students' needs were matched with the learners' perceptions of the EOP needs of pre-service flight attendants in which very few discrepancies were noticed in teachers and learners in this regard. These discrepancies between the students and instructors on the learners' ESP needs could underline the important role of implementation of NA in ESP contexts as far as teaching methods and strategies, syllabus design, and materials developments are concerned (Bojovic, 2006).

6. Conclusion

The present study aimed at exploring the needs of Social Sciences ESP courses from the Iranian Social Sciences students' and ESP instructors' perspectives, which was conducted with a group of students who were passing ESP course in the third semester and a group of EFL and subject-specific instructors with a questionnaire as the instrument. The findings showed a difference in order and importance of the four English language skills perceived by the participants as the present needs. The discrepancy between the students' and instructors' perceptions in this study, on the one hand, and the significant difference between the findings of the present study and some studies conducted in fields like nursing, computer engineering and pre-service cabin crew, on the other hand, reflects the special nature of the Social Sciences fields.

Iranian university students of different fields should pass ESP courses. The primary goal of ESP courses is mainly to help them improve reading comprehension skills to implement English resources (Meihami & Werbińska, 2022). Other studies (e.g., Afshar & Movassagh, 2016; Aliakbari & Boghayeri, 2014; Atai & Nazari, 2011; Esfandiari, 2015; Shahini & Riazi, 2001; Taghipour et al., 2020) show that ESP students' language needs are not successfully met in the ESP courses. It is evident that ESP courses in general and ESP courses for Social Sciences students, in particular, are presented without consulting with English Language Departments and without doing NA and observing and applying the students' needs (Javid & Mohseni, 2020; Yatroon, 202). Consequently, this could lead to ESP students' inability to implement English in special settings and occasions, like composing and publishing research papers, speaking in seminars and conferences, reading field-specific texts, or listening to lectures and presentations (Sarani et al., 2017). Therefore, based on the findings of the present study, the current ESP

curricula and courses should be revised based on the learners' present and target situation needs.

One of the main conclusions of the present study is that due to the frequent transformations in the ESP students' needs, the ESP curricula and courses need to be revisited regularly based on the new needs of students. Based on Wissema (2009), all universities are in a transition process among different generations that requires novel instructional shifts at different levels, such as syllabus design and materials development. In addition, in the new era, students in higher education should be able to communicate effectively in English as an International Language (EIL), which requires acquiring the main four skills adequately to meet their immediate and long-term needs. Another significant conclusion of this study is the presentation of the language skills based on the nature of disciplines and fields of study. Based on the findings, the Social Sciences students and instructors perceived that reading skill should be presented first; it can be due to the fact that most of their courses are theoretical, and they should mainly study written texts.

This study may have some implications for ESP instructors, students, ESP curriculum developers, and syllabus designers. Conducting NA and implementation of its findings, in reality, motivates both instructors and students and can help to remove the present problems and improve ESP education. Considering and applying present and future needs rationalize an approach to ESP that is regarded as more appropriate for the specific educational setting as it contains both academic and subject-specific skills which arise from the students' subject discipline (Jordan, 1997 as cited in Chostelidou, 2014). Applying NA is expected to help the students in the process of language education and also encourage them to be actively engaged in the ESP course. In addition, the results of the study could be helpful for Social Sciences ESP syllabus designers and curriculum

developers to reconsider the current ESP curriculum based on the findings. The findings of this study may help the stakeholders to solve some problems and improve ESP education in the Iranian context. There has been much research based on NA in ESP courses throughout the world in recent years, which remained only in theory and intact. Considering these results in EFL education could bridge the gap between theory and practice and provide ESP learners with their present and future needs.

The findings of the study may not be generalizable to other ESP courses as there were some limitations which constrained this research. The first limitation was the number of participants and universities; only 98 Social Sciences students from some of the Markazi universities were selected; therefore, further studies could be conducted by applying more ESP Social Sciences students from other universities to replicate the present study. Moreover, the present study only employed two questionnaires for data collection and did not apply other instruments, like observation or interviews. As a result, future research could complement the quantitative data using interview and observation as qualitative data collection instruments.

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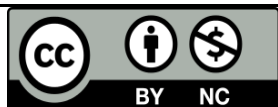
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